

IN THE CLAIMS:

Please cancel Claims 1 to 24 and 35 to 38 without prejudice or disclaimer of the subject matter presented therein. The claims, as pending in the subject application, read as follows.

1 to 24. (Cancelled)

25. (Original) A method of controlling a photovoltaic power generation system comprising a solar cell array comprised of a plurality of solar cell modules connected, one sensor or a plurality of sensors arranged around the solar cell array, and a switch for establishing a short circuit between output terminals of the solar cell array, wherein the short circuit between the output terminals is established based on an output signal from the sensor.

26. (Original) The method according to Claim 25, wherein when the output signal of the sensor is not more than a predetermined value, the short circuit between the output terminals is established.

27. (Original) The method according to Claim 26, wherein an alarm is issued before the short circuit between the output terminals is established.

28. (Original) The method according to Claim 25, wherein when the output signal of the sensor is not more than a predetermined value, an alarm is issued and thereafter the short circuit between the output terminals is established after a lapse of a predetermined time.

29. (Original) The method according to Claim 25, wherein the short circuit between the output terminals is retained before a release operation is carried out.

30. (Original) A method of controlling a photovoltaic power generation system comprising a plurality of solar cell strings each consisting of a plurality of solar cell modules, a plurality of sensors arranged around each of the solar cell strings, and a plurality of switches for establishing a short circuit between output terminals of each of the solar cell strings,

wherein the plurality of solar cell strings are connected in parallel and the short circuit between output terminals is established on a string-by-string basis for the plurality of solar cell strings, based on output signals from the plurality of sensors.

31. (Original) The method according to Claim 30, wherein when output signals from some of the plurality of sensors are not more than a predetermined value, the short circuit between output terminals is established for each of solar cell strings corresponding to the sensors having outputted the output signals of not more than the predetermined value.

32. (Original) The method according to Claim 31, wherein an alarm is issued before the short circuit between output terminals is established.

33. (Original) The method according to Claim 30, wherein when output signals from some of the plurality of sensors are not more than a predetermined value, an alarm is issued and thereafter the short circuit between output terminals is established for each of solar cell strings corresponding to the sensors having outputted the output signals of not more than the predetermined value, after a lapse of a predetermined time.

34. (Original) The method according to Claim 30, wherein a short-circuit state between output terminals of a shorted solar cell string is retained before a release operation is carried out.

35 to 38. (Cancelled)

39. (Original) A method of controlling a photovoltaic power generation system comprising a solar cell string comprised of a plurality of solar cell modules connected, a plurality of sensors provided around the solar cell string, and a switch for establishing a short circuit between output terminals of the solar cell string, based on output signals from the plurality of sensors, the method comprising:

a first step of measuring the output signals from the plurality of sensors;
a second step of normalizing values of the output signals;

a third step of calculating a comparison calculated value D , which is defined below, when at least one of a plurality of normalized output signal values A_x is larger than a reference value S ,

the comparison calculated value $D = (\text{a minimum of the plurality of normalized output signal values } A_x) / (\text{a maximum of the plurality of normalized output signal values } A_x)$;

and a fourth step of establishing the short circuit between the output terminals by the switch when the comparison calculated value D is smaller than a comparison reference value D_0 .

40. (Original) The method according to Claim 39, wherein an alarm is issued before the short circuit between the output terminals is established.

41. (Original) The method according to Claim 40, wherein when an output period of the alarm is longer than a time T_0 , the short circuit between the output terminals is established by the switch.

42. (Original) The method according to Claim 39, wherein the sensors are comprised of solar cells.

43. (Original) A method of controlling a photovoltaic power generation system comprising a plurality of solar cell strings connected in parallel, each solar cell

string being comprised of a plurality of solar cell modules connected and having a plurality of sensors provided around the solar cell string and a switch for establishing a short circuit between output terminals of the solar cell string, the method comprising:

(1) carrying out for each of the plurality of solar cell strings,

a first step of measuring output signals from the plurality of sensors,

a second step of normalizing values of the output signals, and

a third step of calculating a comparison calculated value D_y , which is

defined below, when at least one of a plurality of normalized output signal values A_x is larger than a reference value S ,

the comparison calculated value $D_y = (\text{a minimum of the plurality of normalized output signal values } A_x) / (\text{a maximum of the plurality of normalized output signal values } A_x)$; and

(2) carrying out a fourth step when at least one of the comparison calculated values D_y of the plurality of solar cell strings is smaller than a comparison reference value D_0 ,

the fourth step being a step of establishing a short circuit between output terminals of a solar cell string corresponding to the comparison calculated value D_y smaller than the comparison reference value D_0 , by the switch.

44. (Original) The method according to Claim 43, wherein before the short circuit is established between the output terminals of the solar cell string corresponding to

the comparison calculated value D_y smaller than the comparison reference value D_0 , an alarm is issued for the solar cell string.

45. (Original) The method according to Claim 44, wherein when an output period of the alarm is longer than a time T_0 , the short circuit is established between the output terminals of the solar cell string corresponding to the comparison calculated value D_y smaller than the comparison reference value D_0 .

46. (Original) The method according to Claim 43, wherein the sensors are comprised of solar cells.